KMR 81 D – The first digital shotgun microphone

▶ Features of KMR 81 D

- Digital interference tube microphone with shotgun directional characteristic
- The settings for all functions (see right column) can be stored in the microphone by using a DMI-2 (portable) or DMI-8 (standalone interface)
- Interference/pressure-gradient transducer
- High lateral and back attenuation
- 90°-recording angle
- Switchable filter or preattenuation features
- Extensive accessories for outdoor use
- Light weight

▶ Application Hints

- EFP/ENG

▶ Technical Data

Acoustical operating principle............. Interference transd.
Directional pattern.................................... Supercard./lobe
Frequency range .... 20 Hz...20 kHz
Free-field sensitivity[1)2)] .... −36 dBFS
Equivalent noise level, CCIR[3)] .... 21 dB
Equivalent noise level, A-weighted[3] .... 9 dB-A
Signal-to-noise ratio[2)], CCIR[3)] .... 73 dB
Signal-to-noise ratio[2)], A-weighted[3)] .... 85 dB
Maximum SPL .... 123 dBSPL
Supply voltage range................................. +7 V to +10.5 V
Current consumption...................................... max. 150 mA
Matching connector.. XLR3F
Diameter.. 22 mm
Length .... 212 mm

Preset:
- Sampling rate: 48 kHz
- Gain: 10 dB (variable with DMI-2)
- Compressor on, Attack time 100 ms, Release time 0.5 s, Threshold −10 dBFS, Ratio 2:1

All data with respekt to 0 dB pre-attenuation and 0 dB gain.

[1)] at 1 kHz
[2)] re 94 dBSPL
[3)] according to IEC 60268-1;
CCIR-weighting according to CCIR 468-3, quasi peak;
A-weighting according to IEC 61672-1, RMS

▶ General Features of Solution-D

Interface:
- AES42

Remote controlled functions:
- Low-cut: flat, 40, 80, 160 Hz
- Pre-attenuation: 0 , −6, −12, −18 dB
- Gain: 0...63 dB in 1 dB steps, clickless
- Testsignal: 1 kHz, pink noise, white noise
- Sampling rates: 44.1, 48, 88.2, 96, 176.4, 192 kHz
- Parametric compressor/limiter (incl. de-esser function)
- Independent peak limiter avoiding any clipping
- Switch functions: soft muting, phase reverse, signal lights
- Signal light: blue LED
- System functions, firmware download

Synchronization:
- Asynchronous operation (free-running, AES42 - Mode 1), basic frequency accuracy: ± 25 ppm
- Synchronous operation (AES42 - Mode 2), pulling range: Min. ± 100 ppm

Power supply (phantom power complying with AES42)

Output:
XLR3M, 24 bits as per AES/EBU (AES3)

125 Hz	2 kHz
250 Hz	4 kHz
500 Hz	8 kHz
1 kHz	16 kHz